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EXAMINER

SAYALA, CHHAYA D

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte NOLAN ZEBULON FRANTZ

Appeal 2015-007157
Application 13/142,919
Technology Center 1700

Before CHUNG K. PAK, JEFFREY T. SMITH, and
WESLEY B. DERRICK, *Administrative Patent Judges*.

SMITH, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134(a) from a Final Rejection of claims 1 and 3 through 7. We have jurisdiction under 35 U.S.C. § 6(b).

STATEMENT OF THE CASE

Appellant's invention is generally directed to method for enhancing the palatability of a pet food composition. App. Br. 2. Claim 1 illustrates the subject matter on appeal and is reproduced below:

1. A method for enhancing the palatability of a pet food composition, which comprises adding an amount of lipoic acid or a salt thereof in an amount effective to enhance the palatability of the pet food composition, wherein the effective amount is at least 25 ppm, and wherein the pet food composition further comprises of from 600 to 1,000 IU vitamin E.

App. Br. 8, Claims Appendix.

Appellant (*see generally* App. Br.) requests review of the following rejections from the Final Office Action entered October 15, 2014 (“Final Act.”):

I. Claims 1 and 3–7 under 35 U.S.C. § 112, second paragraph for being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as the invention.

II. Claims 1 and 3–7 under 35 U.S.C. § 102(b) as anticipated by Scherl et al. (US 2006/0134014 A1, published June 22, 2006, hereinafter “Scherl”) or Zicker et al. (US 2005/0232976 A1, published October 20, 2005, hereinafter “Zicker ’976”) or Zicker et al. (US 2002/0076470 A1, published June 20, 2002, hereinafter “Zicker ’470”) as evidenced by *Vitamin E Fact Sheet for Health Professionals* (June 2011), <http://ods.od.nih.gov/factsheets/VitaminE-HealthProfessional> (hereinafter “Vitamin E Factsheet”).

III. Claims 1 and 3–7 under 35 U.S.C. § 103(a) as unpatentable over Scherl or Zicker ’976 or Zicker ’470 and Ann Wortinger, *Nutritional Myths*, 41 J. Am. Anim. Hosp. Assoc. 273 (July/August 2005) (hereinafter “Wortinger”), Repo (US 2006/0153964 A1, published July 13, 2006, hereinafter “Repo”), Addy (US 6,379, 727 B1, issued April 30, 2002, hereinafter “Addy”), and Swenson (US 2008/0233244 A1, issued September 25, 2008, hereinafter “Swenson”) as evidenced by Vitamin E Factsheet.

IV. Claims 1 and 3–7 for non-statutory, obviousness-type double patenting over claims 1–7 and 10–65 of Zicker (US 8,669,282 B2, issued Mar. 11, 2014) (hereinafter “Zicker ’282”).

OPINION

After review of the respective positions provided by Appellant and the Examiner, we AFFIRM the Examiner’s rejections of claims 1 and 3–7 under 35 U.S.C. §103(a) and for non-statutory, obviousness-type double patenting, but REVERSE the Examiner’s rejections of claims 1 and 3–7 under 35 U.S.C. § 112, second paragraph and under 35 U.S.C. § 102(b). We add the following.¹

Rejection I

We reverse the Examiner’s rejection of claims 1 and 3–7 under 35 U.S.C. § 112, second paragraph, as being indefinite. Claim 1 recites a method for enhancing the palatability of a pet food composition comprising adding an amount of lipoic acid or a salt thereof in an amount effective to enhance the palatability of the pet food composition, wherein the effective amount is at least 25 ppm. The Examiner asserts that the term “enhancing” in relation to the term “palatability” is relative terminology that renders claims 1 and 3–7 indefinite because the claims do not define these terms, and Appellant’s Specification “does not provide a standard for ascertaining the requisite degree.” Final Act. 2. In addition, the Examiner asserts that the term “palatability” does not have an accepted definition in the art, and

¹ Appellant argues claims 1 and 3–7 together. *See generally* Appeal Brief. Therefore, we select claim 1 as representative, and claims 3–7 will stand or fall with claim 1. 37 C.F.R. § 41.37(c)(1)(iv) (2015).

the Examiner cites non-patent literature to provide evidence in support of this assertion.² Final Act. 2–4.

However, the Examiner does not carry the burden of showing that one of ordinary skill in the art would not understand the scope and meaning of “an amount effective to enhance the palatability of the pet food composition, wherein the effective amount is at least 25 ppm” recited in claim 1. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992) (“[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a prima facie case of unpatentability”); *Amgen, Inc. v. Chugai Pharm. Co., Ltd.*, 927 F.2d 1200, 1217 (Fed. Cir. 1991) (A claim is considered indefinite under 35 U.S.C. § 112, second paragraph, if it does not reasonably apprise those skilled in the art of its scope). As Appellant correctly argues, the claim language itself and the Specification provide sufficient guidance to allow one of ordinary skill in the art to understand that “an amount effective to enhance the palatability of the pet food composition, wherein the effective amount is at least 25 ppm” refers to lipoic acid in an amount of at least 25 ppm. App. Br. 2–5; Spec. ¶¶ 38–39. Accordingly, one of ordinary skill in the art would understand that the effective amount of lipoic acid for enhancing the palatability of the pet food composition is at least 25 ppm as recited in claim 1, and would thus understand the metes and bounds of the claim. Therefore, we do not sustain the Examiner’s rejection of claims 1 and 3–7 under § 112, second paragraph.

² The Examiner cites Yeomans, *Taste, Palatability and the Control of Appetite*, 57 Proc. Nutr. Soc. 609 (1998); and *Palatability—More than a Matter of Taste*, http://extension.usu.edu/files/publications/factsheet/1_3_1.pdf. Final Act. 2–4.

Rejections II and III

Appellant does not dispute the Examiner's finding that each of Scherl, Zicker '976, and Zicker '470 disclose a food composition for companion animals—including dogs and cats—that includes lipoic acid in an amount of at least about 25 ppm. *Compare* Final Act. 5–7, *with* App. Br. 5–6.

Appellant also does not dispute the Examiner's finding that Scherl discloses that the food composition includes vitamin E in an amount of about 250 ppm to about 2,500 ppm, Zicker '976 discloses that the food composition includes vitamin E in an amount of about 100 ppm to about 2,000 ppm, and Zicker '470 discloses that the food composition includes vitamin E in an amount of at least about 100 ppm. *Compare* Final Act. 5–7, *with* App. Br. 5–6. The Examiner determines that converting vitamin E from units of ppm as disclosed in Scherl, Zicker '976, and Zicker '470 to international units as recited in claim 1 would have been within the ambit of one of ordinary skill in the art at the time of the invention, as evidenced by the Vitamin E Factsheet. Final Act. 7. The Examiner finds that Scherl, Zicker '976, and Zicker '470 thus each disclose feeding pets the same composition having the same components in the same amounts as recited in claim 1, and the Examiner finds that each reference therefore anticipates the claimed method. Final Act. 5–7.

The Examiner further finds that Wortinger, Repo, Addy, and Swenson all disclose that the antioxidant activity of vitamin E and lipoic acid make them useful as preservatives to prevent rancidity in pet foods. Final Act. 8–11. The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of the invention to include lipoic acid and vitamin E in pet food in the amounts disclosed in Scherl, Zicker '976, and

Zicker '470 to prevent rancidity in the pet food as taught by Wortinger, Repo, Addy, and Swenson, which would have enhanced the palatatility of the food. Final Act. 10–11.

Appellant argues that international units of vitamin E as recited in claim 1 are a measure of bioavailability rather than weight, and Appellant contends that converting international units to units of ppm as disclosed in Scherl, Zicker '976, and Zicker '470 is not a standard conversion that would have been obvious to one of ordinary skill in the art at the time of the invention, as the Examiner asserts. App. Br. 5–6. In response to this argument, the Examiner provides calculations in the Answer in which the Examiner converts 600–1000 international units of vitamin E as recited in claim 1 to 402–670 ppm, based on the conversion rules set forth in the Vitamin E Factsheet. Ans. 15–16. Appellant does not dispute the Examiner's calculations, or dispute that the ranges of vitamin E disclosed in each of Scherl, Zicker '976, and Zicker '470 encompass the calculated range.³

Although Scherl, Zicker '976, and Zicker '470 each do not describe the amount of vitamin E in pet food compositions comprising at least 25 ppm lipoic acid with sufficient specificity to constitute anticipation of the method of claim 1 within the meaning of 35 U.S.C. § 102(b)⁴, we agree with

³ Appellant did not elect to file a Reply Brief to respond to the Examiner's statements in the Answer.

⁴ *Atofina v. Great Lakes Chemical Corp.*, 441 F.3d 991, 999–1000 (Fed. Cir. 2006) (“Here, the prior art, . . . , discloses a temperature range of 100 to 500 °C which is broader than and fully encompasses the specific temperature range claimed . . . of 330 to 450 °C. Given the considerable difference between the claimed range and the range in the prior art, no reasonable fact

the Examiner that the applied prior art would have rendered the claimed method prima facie obvious. In particular, Scherl, Zicker '976, and Zicker '470 disclose pet food compositions comprising a combination of lipoic acid and vitamin E in amounts that overlap or encompass the corresponding ranges recited in claim 1, based on the Examiner's undisputed conversion of the international units of vitamin E recited in claim 1 to ppm. Scherl ¶¶ 20, 37, 41, 45; Zicker '976 ¶¶ 5, 16, 17; Zicker '470 ¶¶ 4, 15, 16.

Specifically, Scherl discloses that the pet food composition includes vitamin E in an amount of about 500 ppm to about 1,500 ppm, Zicker '976 discloses that the pet food composition includes vitamin E in an amount of about 500 ppm to about 1,000 ppm, and Zicker '470 discloses that the pet food composition includes vitamin E in an amount of about 500 ppm to about 1,000 ppm, which all overlap the calculated range of 402–670 ppm vitamin E. Scherl ¶ 41; Zicker 976 ¶ 17; Zicker 470 ¶ 16. *In re Peterson*, 315 F.3d 1325, 1329 (Fed. Cir. 2003) (“In cases involving overlapping ranges, we and our predecessor court have consistently held that even a slight overlap in range establishes a prima facie case of obviousness.”)

Furthermore, Example 1 of Appellant's Specification describes particular dog food compositions of Appellant's invention that include vitamin E at a level of 600–1000 international units, while other portions of Appellant's Specification broadly describe the amount of vitamin E in the pet food composition of the invention in units of ppm, and indicate that at least about 100 ppm should be included in the pet food composition, and in certain embodiments of the invention, vitamin E in an amount of about 500

finder could conclude that the prior art describes the claimed range with sufficient specificity to anticipate this limitation of the claim.”).

to about 1,000 ppm can be used. Spec. ¶¶ 56, 71. Thus, read in its entirety, Appellant's Specification indicates that 600–1000 international units of vitamin E falls within the range of at least about 100 ppm, and this range described in Appellant's Specification encompasses the ranges of vitamin E disclosed in Scherl, Zicker 976, and Zicker 470, reasonably indicating that the range of 100–1000 international units of vitamin E recited in claim 1 overlaps the prior art ranges. Accordingly, Appellant's argument is inconsistent with the disclosure provided in Appellant's own Specification.

Moreover, because vitamin E was known to be an antioxidant as taught by the applied prior art, the amount of vitamin E in a pet food composition was a recognized result-effective variable, and one of ordinary skill in the art reasonably would have been led by the combined disclosures of the applied prior art to optimize the level of vitamin E in a pet food composition, and would have arrived at the optimal amount, such as that claimed, through nothing more than routine experimentation. *See, e.g.*, Scherl ¶ 37; Zicker '976 ¶ 16; Zicker '470 ¶ 15. *In re Boesch*, 617 F.2d 272, 276 (CCPA 1980) (“[D]iscovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art.”); *In re Aller*, 220 F.2d 454, 456 (CCPA 1955) (“[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.”).

Appellant's arguments are therefore unpersuasive of reversible error in the Examiner's conclusion of obviousness, and we accordingly sustain the Examiner's rejection of claims 1 and 3–7 under 35 U.S.C. § 103(a), but do not sustain the Examiner's rejection of claims 1 and 3–7 under 35 U.S.C. § 102(b).

Rejection IV

In contesting the Examiner's rejection of claims 1 and 3–7 for obviousness-type double patenting, Appellant argues that the claims of the reference patent (Zicker '282) recite vitamin E in units of ppm rather than in International Units as recited in claim 1, and Appellant again contends that converting International Units to units of ppm is not a standard conversion that would have been obvious to one of ordinary skill in the art at the time of the invention. App. Br. 6.

However, we find Appellant's argument lacking in persuasive merit because Appellant does not identify a patentable distinction between the instant claims and claims 1–7 and 10–65 of Zicker '282, particularly claim 31 (App. Br. 6), which recites:

31. A pet food composition comprising an effective amount of lipoic acid to enhance palatability to a companion animal in need thereof, wherein said effective amount of lipoic acid to enhance palatability is at least 25 ppm to about 600 ppm, the pet food composition further comprising vitamin E at a level of 500–1000 ppm, vitamin C at levels of 100–200 ppm, and fat, carbohydrate, protein, and dietary fiber to form a pet food.

As discussed above, Appellant does not dispute the Examiner's determination that 600–1000 international units of vitamin E as recited in claim 1 corresponds to 402–670 ppm vitamin E, which significantly overlaps the range of 500–1000 ppm vitamin E recited in claim 31 of Zicker '282. *Peterson*, 315 F.3d at 1329. In addition, as also discussed above, Appellant's Specification indicates that 600–1000 international units of vitamin E as recited in claim 1 reasonably overlaps the range of 500–1000 ppm vitamin E recited in claim 31 of Zicker 282. Moreover, as further discussed above, the amount of vitamin E in a pet food composition was

recognized in the art as a result-effective variable, and one of ordinary skill in the art reasonably would have been led by the claims of Zicker '282 to optimize the level of vitamin E in a pet food composition, and would have arrived at the optimal amount, such as that claimed, through nothing more than routine experimentation. *Boesch*, 617 F.2d at 276. Appellant's arguments are therefore unpersuasive of reversible error, and we accordingly sustain the Examiner's rejection of claims 1 and 3–7 for non-statutory, obviousness-type double patenting.

ORDER

For the reasons set forth above and in the Answer, the decision of the Examiner is affirmed.

TIME PERIOD

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1).

AFFIRMED